

REMARKS

Claims 1-42 are pending in the application. Claims 1-42 stand rejected.

In the Office Action Summary it is indicated that only some of the certified copies of the priority documents have been received.

It is respectfully submitted that all the certified copies of the priority documents have been submitted. Appropriate correction is requested.

Applicant's independent claims have been amended in order to clarify the claimed invention. In particular claims 1-4, 15-18, and 29-32 are amended to rearrange the sentence structure to clarify the features and inconsistencies between the claims have been resolved.

No new matter is entered.

Claims 1-6, 15-20 and 29-34 are rejected under 35 U.S.C. § 102(e) as anticipated by Kezys (U.S. 6,492,942).

It is respectfully submitted applicant's claimed invention is not disclosed or suggested by Kezys for at least the following reasons:

Kezys discloses a communication node that is described or suggested as having an adaptive parasitic array antenna with at least one active element and one or more parasitic elements, a TX/RX module, and an adaptation controller.

In Kezys the adaptation controller of the communication node controls the connection between the active element and the parasitic element via a controlled impedance network connected to each parasitic element. (col. 5, lines 53-57).

In contrast to applicant's claimed invention, Kezys does not disclose, for example, that weights (or a set of reactances) are obtained for the plurality of beam forming antennas to function as one of: an "adaptive beam forming array antenna", an "adaptive null-forming array

antenna", or an "aerial beam forming antenna". These features are disclosed in claims 1, 2, 15, and 16 of the present application.

For example claim 1 includes: a computing section for calculating a set of weights and a weight setting section for selecting, from the calculated set of weights, a particular set of weights for an array antenna that has received an arriving wave with maximum channel quality as monitored by the channel quality monitoring section, and for setting the particular set of weights in common to all of the plurality of array antennas.

It appears the Office Action is relying on column 5, line 40 through column 6, line 25 to teach all the features of claim 1. However the above features relating to the weights could not be found are were not suggested in the reference.

In contrast to applicant's claimed invention Kezys does not disclose that weights (or a set of reactances) are commonly used for setting to all of a plurality of beam forming antennas.

For example applicant's "weights" are useful for loading to a beam forming antenna that received an arrival wave with the maximum channel quality or good reception quality. The "beam forming antenna" refers to one of a plurality of beam forming antennas, and the "plurality of beam forming antennas" refers to all of an "array antenna", an "aerial beam forming antenna," and an "adaptive beam forming array antenna." These features are recited, for example, in claims 1-6, 15-20, and 29-34 of the present application.

In addition, for example applicant's claim 4 includes: a weight setting section for selecting, from the calculated arrival angles, an arrival angle of a desired wave as an arriving wave with good channel quality as monitored by the channel quality monitoring section and an arrival angle of a disturbing wave, for correcting one of the calculated sets of weights to such values as to allow an array antenna, that received an arriving wave with maximum channel

quality as monitored the channel quality monitoring section, to have a main lobe in a direction of the arrival angle of the desired wave and have a null point in a direction of the arrival angle of the disturbing wave, and for setting the corrected set of weights in common to all of the plurality of array antennas

Kezys does not disclose that these weights (or set of reactances), commonly used for loading to all of a plurality of beam forming antennas, are obtained as weights having been formed for each main lobe in the direction of the arrival angle of the desired wave that the transmission quality was good at and a null point in the direction of the arrival angle of the disturbing wave. The desired wave is received through one of the plurality of the beam forming antennas.

Also, the adaptive parasitic array antenna provided at the communication node in Kezys is different from the plurality of beam forming antennas in the present invention in that there is not a plurality of elements provided in Kezys.

For at least the foregoing reasons it is respectfully requested the rejection be withdrawn.

Claims 7-14, 21-28, and 35-42 are rejected under 35 U.S.C. § 103 as being unpatentable over Kezys in view of Lindskog et al.

Applicant's claims 7-14, 21-28, and 35-42 are dependent on claims 1-6, 15-20, and 29-34. It is respectfully submitted that the Lindskog et al. reference fails to teach the features lacking in the Kezys reference regarding at least the independent claims as discussed above. Therefore the combination of references fails to teach or suggest all of the claimed features.


For at least the foregoing reasons it is respectfully submitted claims 7-14, 21-28, and 35-42 should be deemed allowable.

Applicant's claimed feature bring about advantageous that are not achievable in Kezys or by the combination of Kezys and Lindskog et al.. For example the claimed radio communication apparatus provides advantages in suppressing an interference wave, adapting to the configuration and characteristics of a radio transmission path, and compensating for a variation in the transmission characteristics of the radio transmission path (See pg. 3, lines 21-24 in the Specification of the present application as filed). Also the claimed invention can enhance the performance, added values, and total reliability of a radio transmission system or a radio applied system to which the invention is applied and to keep a high and stable total reliability (See pg. 4, lines 12-14).

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,


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